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(FILE 'HOME' ENTERED AT 11:49:28 ON 26 AUG 2005)

FILE 'CAPLUS' ENTERED AT 11:49:36 ON 26 AUG 2005

E HALL LACHLAN/AU
L1 13 SEA ABB=ON PLU=ON ("HALL LACHLAN E"/AU OR "HALL LACHLAN
EVERETT"/AU)
E SILVERBROOK KIA/AU
L2 199 SEA ABB=ON PLU=ON "SILVERBROOK KIA"/AU
L3 203 SEA ABB=ON PLU=ON L1 OR L2
D 1-10 TI
L4 8 SEA ABB=ON PLU=ON L3 AND (CHROMOPHORE OR DYE)

FILE HOME

FILE CAPLUS

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 1-8 bib abs

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:1004592 CAPLUS
 DN 140:6182
 TI Infrared chromophores and printing inks containing them
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Australia
 SO U.S. Pat. Appl. Publ., 118 pp., Cont.-in-part of U.S. Ser. No. 693,301.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002136972	A1	20020926	US 2001-927684	20010810
	EP 1196752	A1	20020417	EP 2000-938343	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002088064	A1	20020711	US 2001-927685	20010810
	ZA 2002000847	A	20030130	ZA 2002-847	20020130
	US 2003094500	A1	20030522	US 2002-291577	20021112
	US 6843420	B2	20050118		
	US 2005022937	A1	20050203	US 2004-933285	20040903
	US 2005061448	A1	20050324	US 2004-949307	20040927
	US 2005064502	A1	20050324	US 2004-986403	20041112
	US 2005064503	A1	20050324	US 2004-986404	20041112
PRAI	AU 1999-559	A	19990525		
	AU 1999-1313	A	19990630		
	AU 1999-3632	A	19991025		
	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	US 2000-693301	A2	20001020		
	AU 1999-3457	A	19991015		
	AU 1999-4392	A	19991201		
	AU 2000-5829	A	20000224		
	US 2000-575154	A1	20000523		
	WO 2000-AU775	W	20000630		
	US 2002-291577	A1	20021112		
	US 2002-322450	A1	20021219		

OS MARPAT 140:6182

AB Cycloalkane-based compds., especially IR dyes which absorb strongly in the near IR region of the spectrum but poorly in the visible regions, are disclosed. The dyes are characterized by calculated IR spectra and are suitable for use in IR-absorbing printing inks.

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:555843 CAPLUS
 DN 137:126577
 TI Dibenzoanthraquinone based chromophores as infrared dyes
 for inks for jet printing
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Australia
 SO U.S. Pat. Appl. Publ., 98 pp., Cont.-in-part of U.S. Ser. No. 693,301.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002096084	A1	20020725	US 2001-928108	20010810
	EP 1196752	A1	20020417	EP 2000-938343	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2002088064	A1	20020711	US 2001-927685	20010810
	ZA 2002000847	A	20030130	ZA 2002-847	20020130
	US 2003094500	A1	20030522	US 2002-291577	20021112
	US 6843420	B2	20050118		
	US 2005022937	A1	20050203	US 2004-933285	20040903
	US 2005061448	A1	20050324	US 2004-949307	20040927
	US 2005064502	A1	20050324	US 2004-986403	20041112
	US 2005064503	A1	20050324	US 2004-986404	20041112
PRAI	AU 1999-559	A	19990525		
	AU 1999-1313	A	19990630		
	AU 1999-3632	A	19991025		
	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	US 2000-693301	A2	20001020		
	AU 1999-3457	A	19991015		
	AU 1999-4392	A	19991201		
	AU 2000-5829	A	20000224		
	US 2000-575154	A1	20000523		
	WO 2000-AU775	W	20000630		
	US 2002-291577	A1	20021112		
	US 2002-322450	A1	20021219		

OS MARPAT 137:126577

AB An IR dye, a derivative of dibenzoanthraquinone has an absorption peak in the near IR and a high value of ϵ ratio, that is ϵ ratio >2. Calculated absorption spectra were given for the zwitterionic forms of 8 dyes.

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:555827 CAPLUS
 DN 137:126576
 TI Bridged diarylpolymethine chromophores as infrared dyes
 for inks for jet printing or offset printing
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Australia
 SO U.S. Pat. Appl. Publ., 104 pp., Cont.-in-part of U.S. Ser. No. 693,301.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002095733	A1	20020725	US 2001-928055	20010810
	EP 1196752	A1	20020417	EP 2000-938343	20000630
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	ZA 2002000847	A	20030130	ZA 2002-847	20020130
	US 2003094500	A1	20030522	US 2002-291577	20021112
	US 6843420	B2	20050118		
	US 2005022937	A1	20050203	US 2004-933285	20040903
	US 2005061448	A1	20050324	US 2004-949307	20040927
	US 2005064502	A1	20050324	US 2004-986403	20041112
	US 2005064503	A1	20050324	US 2004-986404	20041112
PRAI	AU 1999-559	A	19990525		
	AU 1999-1313	A	19990630		
	AU 1999-3457	A	19991015		
	AU 1999-3632	A	19991025		
	AU 1999-4392	A	19991201		
	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	US 2000-693301	A2	20001020		
	AU 2000-5829	A	20000224		
	US 2000-575154	A1	20000523		
	WO 2000-AU775	W	20000630		
	US 2002-291577	A1	20021112		
	US 2002-322450	A1	20021219		

OS MARPAT 137:126576

AB An IR dye comprises 2 bridged diarylpolymethine type dyes or derivs. connected together at either the 3, 4, 5 or 6 position by a central moiety such that the 2 dyes are located on each side of the central moiety, where the IR dye absorbs strongly in the near IR region of the spectrum but poorly in the visible region of the spectrum. The central moiety is selected from squarylium, croconium, methinologs and derivs. Calculated absorption spectra are shown for the zwitterionic forms of 8 dyes.

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:142815 CAPLUS
 DN 136:185329
 TI Infrared **chromophores** and printing inks containing them
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Silverbrook Research Pty. Ltd., Australia
 SO PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002014438	A1	20020221	WO 2001-AU999	20010814
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
	RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,				
	UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001079501	A5	20020225	AU 2001-79501	20010814
PRAI	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	WO 2001-AU999	W	20010814		
OS	MARPAT 136:185329				
AB	Cycloalkane-based IR dyes which absorb strongly in the near IR region of the spectrum but poorly in the visible regions are disclosed. The dyes are characterized by calculated IR spectra and are suitable for use in IR-absorbing printing inks.				
RE.CNT	3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:142814 CAPLUS
 DN 136:185328
 TI Cycloalkenone-bridged heterocyclic diarylpolymethine near-IR dyes
 and printing inks containing them
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Silverbrook Research Pty. Ltd., Australia
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002014437	A1	20020221	WO 2001-AU1002	20010814
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001079503	A5	20020225	AU 2001-79503	20010814
PRAI	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	WO 2001-AU1002	W	20010814		
OS	MARPAT 136:185328				
AB	Disclosed are IR dyes which comprise two bridged diarylpolymethine type dyes or derivs. thereof connected together by a central cycloalkenone moiety, wherein the dyes absorb strongly in the near-IR region of the spectrum but poorly in the visible region of the spectrum. The dyes, typically squarylium-based, are suitable for IR jet-printing inks. Examples of calculated spectra were given for 8 zwitterionic dyes.				
RE.CNT	6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:142812 CAPLUS
 DN 136:185327
 TI Heterocyclic quinone near-IR dyes and printing inks containing
 them
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Silverbrook Research Pty. Ltd., Australia
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002014435	A1	20020221	WO 2001-AU1001	20010814
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001079502	A5	20020225	AU 2001-79502	20010814
PRAI AU 2000-9376	A	20000814		
AU 2000-9412	A	20000814		
AU 2000-9509	A	20000818		
AU 2000-9561	A	20000821		
AU 2000-9571	A	20000821		
WO 2001-AU1001	W	20010814		

OS MARPAT 136:185327

AB IR dyes which absorb strongly in the near-IR region of the spectrum but poorly in the visible region are disclosed. The heterocyclic polycyclic quinone dyes are suitable for solvent-based jet printing inks. Calculated spectra for 8 zwitterionic dyes were given.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:142811 CAPLUS
 DN 136:185326
 TI Near-IR heterocyclic dyes and solvent-based inks containing them
 IN Hall, Lachlan Everett; Silverbrook, Kia
 PA Silverbrook Research Pty. Ltd., Australia
 SO PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002014434	A1	20020221	WO 2001-AU1000	20010814
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,				
	RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,				
	UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
	DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				
	BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001083676	A5	20020225	AU 2001-83676	20010814
PRAI	AU 2000-9376	A	20000814		
	AU 2000-9412	A	20000814		
	AU 2000-9509	A	20000818		
	AU 2000-9561	A	20000821		
	AU 2000-9571	A	20000821		
	WO 2001-AU1000	W	20010814		

OS MARPAT 136:185326

AB IR dyes which absorb strongly in the near-IR region of the spectrum but poorly in the visible region are disclosed. They are useful as IR absorbers in IR jet-printing inks. Calculated absorption spectra were given for the zwitterionic forms of 5 heterocyclic quinone dyes.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:414061 CAPLUS
DN 127:36070
TI Dye and pigment in a microemulsion based ink
IN Silverbrook, Kia
PA Eastman Kodak Company, USA; Silverbrook, Kia
SO PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9716497	A1	19970509	WO 1996-US16904	19961021

W: JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI AU 1995-6241 A 19951030

AB An ink composition having the property of a large reduction of surface tension with

increasing temperature, phase inversion temperature 60-70°, and also a high colorant loading is comprised of water-soluble dyes, oil-soluble dyes, H2O miscible pigments, and oil miscible pigments. Incorporating oil-soluble dyes and/or oil miscible pigments in the oil component of the microemulsion can increase the colorant loading without substantially increasing the viscosity of the ink. Low viscosity is important for printers based on LIFT (liquid ink fault tolerant) printing principles, printing speed improves with low viscosity. Pigment or dyes can be simultaneously incorporated in the H2O phase of the microemulsion.